Check List 10(1): 156–159, 2014

ISSN 1809-127X (available at *www.checklist.org.br*)

Check List
Journal of species lists and distribution

NOTES ON GEOGRAPHIC DISTRIBUTION

New distribution records of the Buff-fronted Owl *Aegolius harrisii* Cassin, 1849 (Aves: Strigidae) in Peru

Antonio García Bravo and Javier Barrio *

Centro de Ornitología y Biodiversidad (CORBIDI), Calle Santa Rita 105, oficina 202, Urbanización Huertos de San Antonio, Lima 33, Peru.
* Corresponding author: *javbar@corbidi.org*

ABSTRACT: We review the distribution of the Buff-fronted Owl *Aegolius harrisii harrisii* in Peru, supported by unpublished museum records and new specimens and observations. Compared to previous published records, the distribution and elevation range for the species in Peru are expanded significantly. Based on all records, we deduce that the overall distribution of *A. harrisii* in Peru is almost continuous, from the northwestern Andes to the eastern southern Andes, between 250 and 2960 m. The northern Peruvian Andes show a dense distribution of A. harrisii records compared to the distribution elsewhere in the Andes.

The Buff-fronted Owl *Aegolius harrisii* (Cassin, 1849) is a rare and local species that frequently passes unnoticed. A small owl (19–23cm), it is identified by the buff face crossed by a blackish "Y" over the eyes and the bill, the buff underside without marks, and brown wings with white spots (Figure 1; Meyer de Schauensee 1966; Hilty and Brown 1986; Fjeldså and Krabbe 1990; Marks *et al.* 1999; König *et al*. 1999; Ridgely and Greenfield 2001; Hilty 2003; Schulenberg *et al*. 2010). *Aegolius harrisii* is distributed throughout much of South America (Fjeldså and Krabbe 1990). Other than a reportedly continuous distribution from southeast Brazil to Paraguay and northeast Argentina, its distribution includes numerous scattered localities in northern and western South America (Fjeldså and Krabbe 1990).

Presently, three subspecies are recognized within *A. harrisii*: 1) *A. h. harrisii* (Cassin, 1849), of the Andes from northwestern Venezuela south to central Peru and the taxon treated in this article; 2) *A. h. iheringi* (Sharpe, 1899), of eastern Bolivia, Paraguay, eastern and central Brazil, south to northeastern Argentina and northeastern Uruguay; and 3) *A. h. dabbenei* (Olrog, 1979), in northwest Argentina. The validity of the three subspecies is doubted by Girão and Albano (2010).

The elevation range reported for *A. harrisii* is 600 to 3800 m (Meyer de Schauensee 1966; Hilty and Brown 1986; Fjeldså and Krabbe 1990; Marks *et al.* 1999; König *et al*. 1999; Ridgely and Greenfield 2001; Hilty 2003). However, in Brazil, the species has been reported to as low as 50 m (Negret *et al.*1984). Throughout its range, the species inhabits very different habitat types and climates: e.g., tropical rainforest, montane semi-humid forests, palm plantations, *Podocarpus* forests, *Polylepis* forests, chaco, *caatinga*, central Brazil cerrado, and Tumbesian dry forest, even in urban areas (Negret *et al*. 1984; Fjeldså and Krabbe 1990; Studer and Teixeira 1994; Marks *et al.* 1999; König *et al.* 1999).

In this article, we cover the distribution of the subspecies *Aegolius harrisii harrisii* in Peru and compare it to what is known in other parts of the Andes. According to Schulenberg *et al*. (2010), in Peru *Aegolius h. harrisii* occurs in three separate areas (green dots in Figure 2), between 1500 and 2900 m, mainly in the east slope of the Andes, with some records west of the Andes in the Tumbes and Piura departments. However, our new records of the species, and a more updated revision of museum specimens, show a more widespread distribution of the species in Peru, particularly in the central and southern portions of the country.

We obtained information of six unpublished records from scientific collections, one unpublished recording of the species from Xeno-Canto (http://www.xeno-canto.

FIGURE 1. *Aegolius harrisii* at San Antonio Private Conservation Area, Amazonas department (Photo by Michell León).

org), and three direct observations and mist-netted individuals. The scientific collections we researched were: Museo de Historia Natural de la Universidad Nacional Mayor de San Marcos (MUSM), Centro de Ornitología y Biodiversidad (CORBIDI), Museo de Historia Natural de la Universidad San Agustín de Arequipa (MUSA), Louisiana State University Museum of Natural Science (LSUMZ), Museum of Comparative Zoology Harvard University (MCZ), The Field Museum (FMNH), and the University of Kansas Natural History Museum (UKNHM). The map with the localities was created using the GIS software ArcView 3.3.

Locations with published records or collected material included in Schulenberg *et al*. (2010; *fide* T. Schulenberg, personal communication) were: 1) Cerro Conchapen, Alto Yurinaqui, at 1524 m of elevation, along the border between Pasco and Junin departments, two individuals collected (FMNH 285086 and 287773) by P. Hocking and G. López on 06 January and 06 July 1969 (Parker *et al.* 1985; Remsen and Traylor 1983); 2) directly below Cruz Blanca, at 1740 m, on the west slope of the western Cordillera, 15 km east of Canchaque, Huancabamba province, Piura department, two individuals collected (LSUMZ 77995 and 77996) by K. and R. Thomas on 05 and 06 December 1974 (Parker *et al*. 1985); 3) east of Cerro Chinguela, at 2960 m, Huancabamba province, Piura department, one individual collected (LSUMZ 87296) by J. W. Eley on 28 June 1978 (Parker *et al.* 1985; 4) Cushi, at 1800 m, Oxapampa province, Pasco department, one individual collected (LSUMZ 128161) by T. Schulenberg, on 30 June 1985; 5) Cordillera Azul, in the Pauya river watershed, at 425 m, Ucayali province, Loreto department, one individual collected (MUSM uncataloged; tissue sample LSUMZ B40047-48) by the LSUMZ-MUSM expedition, on 02 July 2000; 6) Cerro el Barco in Cerros de Amotape National Park, at 1415 m, Contralmirante Villar province, Tumbes department, one individual collected (CORBIDI AV-07675) by the LSUMZ – CORBIDI expedition on 22 July 2009; and 7) Cerro el Barco in Cerros de Amotape National Park, at 1440 m, Contralmirante Villar province, Tumbes department, one individual collected (LSUMZ uncataloged) by the LSUMZ – CORBIDI expedition on 23 July 2009.

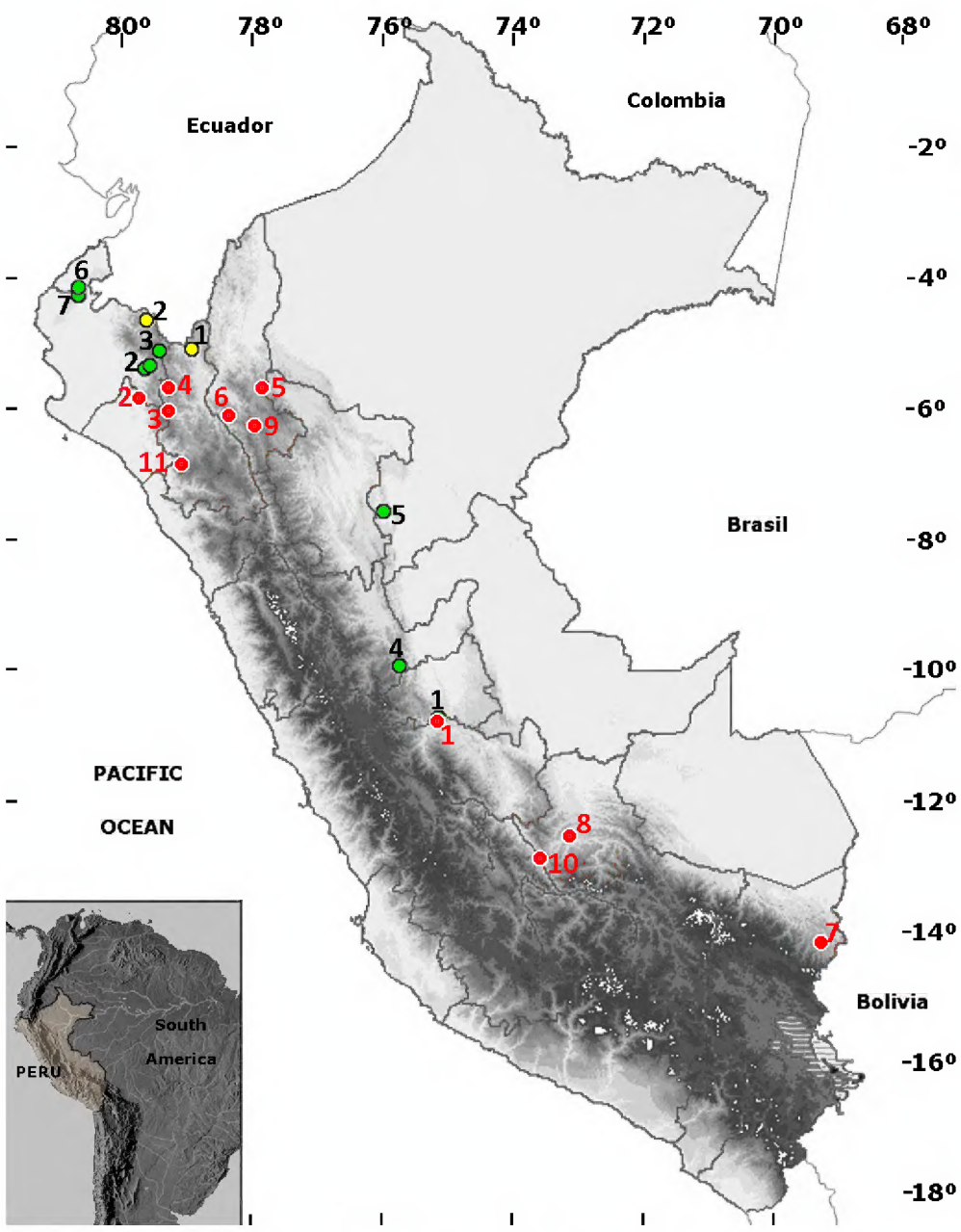

Figure 2. Distribution map of *Aegolius harrisii* in Peru. Green dots are localities upon which the map of Schulenberg et al. (2010) was made, yellow dots indicate published records not included in Schulenberg et al. (2010), red dots with white borders indicate new records (present work). Numbers refer to numbered localities in the text.

Here we include two published records not included in Schulenberg *et al.* (2010): 1) East of San Jose de Lourdes, near Cordillera del Condor, at 1950 m, San Ignacio province, Cajamarca department, one individual collected (MCZ 331073) by J. Fitzpatrick, on 16 July 1976 (Parker *at al.* 1985); and 2) Huamba, at 2900 m, Ayabaca province, Piura department, one individual collected (MUSM 19602) by L. Salinas, on 09 October 1997 (Vellinga *et al.* 2004).

In this article, we include 10 new records of *Aegolius h. harrisii* not previously published: 1) Cerro Conchapen, Alto Yurinaqui, at 1524 m of elevation, along the border between Pasco and Junin departments, a locality already considered among published records; one individual collected (MUSM 38005) by P. Hocking, on 05 January 1969; 2) Quebrada Caballito, El Tocto, at 250 m, Lambayeque province, Lambayeque department, vocalization of one individual recorded by N Krabbe on 24 May 1987 (www.xeno-canto.org/45851); 3) Chiñama forest, at 2280 m, Ferreñafe province, Lambayeque department, one individual collected (MUSM 12786) by L. Salinas on 20 August 1988; 4) Quebrada Lanchal, Sallique, at 2700 m, Jaen province, Cajamarca department, one individual collected (LSUMZ B32356) by D.G. Christian on 20 July 1998; 5) Abra Patricia, at 2280 m, Bongará province, Amazonas department, one individual mist-netted, photographed and released by C. Jiménez, on 02 May 2007 (Figure 3); 6) Tuyanlla, at 2050 m, Lonya Grande province, Amazonas department, one individual collected (MSB 167511) by the Museum of Southwestern Biology of the University of New Mexico – CORBIDI expedition, on 15 July 2008; 7) San Juan del Oro, at 2200 m, Sandia province, Puno department, one individual collected (CORBIDI AV-08214) by the UKNHM – CORBIDI expedition, on 12 November 2009; 8) Santa Rosa de Kuviriari – Echarate, at 1680 m, Convención province, Cusco department, one individual mistnetted by J. Bernal (Figure 4), on 28 January 2010; 9) San Antonio Private Conservation Area, at 1850 m, Chachapoyas province, Amazonas department, one individual observed by AGB and photographed by M. León (Figure 1), on 05 July 2010; and 10) San Antonio – Anco, at 690 m, La Mar province, Ayacucho department, one individual collected (MUSA 3554) by D. Cáceres, on 21 August 2010.

Additionally, there is one record (Irma Franke, unpublished data) from Las Carpas, high part of the Zaña valley, Cajamarca department. We include this record despite there is no voucher, and her report only mentioned the locality, but no explanation was given on the type of record (observed, heard or mistnetted), the date the individual was recorded, coordinates or altitude. We mapped it in the location mentioned above, and is depicted as number 11.

Previous records of *Aegolius h. harrisii* in Peru were restricted to seven localities, five of which were in the departments of Tumbes and Piura, northern Peru. As a result, Schulenberg *et al.* (2010) considered the species local and rare. In this article we present thirteen records for the species not included in the map in Schulenberg *et al.* (2010). Based on this new information, *Aegolius h. harrisii* appears to have a more extensive distribution on both sides of the Andes. Of the new records presented here, four include the western slope of the Andes in the departments of Piura, Lambayeque and Cajamarca. Two new records are located on the east slope in northern Cajamarca, three records are restricted to the southern portion of the Amazonas department, and the remaining four are single reports from each of the following departments: Junin/ Pasco, Ayacucho, Cuzco and Puno. These last three records significantly increase the species' distribution in Peru. Additionally, the elevation range for *Aegolius h. harrisii* in Peru is from 250 m (El Tocto) to 2960 m (Cerro Chinguela). The lowest elevation was of an individual encountered in May 1987 (as described above), after strong El Niño southern oscillation rains in northwest Peru (Marcharé and Ortlieb 1993). The subsequent change in vegetation structure and composition may have influenced the species' use of lower elevations in the area.

Figure 3. *Aegolius harrisii*, at Abra Patricia, Amazonas department (Photo by Carlos Jiménez).

Figure 4. *Aegolius harrisii*, at Santa Rosa de Kuviriari, Cusco (Photo by Jean Bernal).

Based on the distribution of *Aegolius h. harrisii* in other parts of northern and western South America (von Sneidern 1954; Fitzpatrick and Willard 1982; Hilty 2003; Córdoba and Ahumada 2005; BirdLife International 2011), and from recordings at Xeno-Canto (http://www.xeno-canto.org), (S. Mayer: XC 1645, C. Vogt: XC 33951, N. Athanas: XC 35420, and N. Krabbe: XC 45852, 45994-45996, 45998, 46000, 46001, 46005, 46007-46014), we expect a less fragmented distribution along both sides of the Andes from Venezuela to north Peru, south along the eastern slope of the central and southern Andes of Peru, to the Amazonian slope of the Andes in Bolivia. The absence of additional distributional records through the humid forests of the central and southern Peruvian Andes can be related to the species' low natural density, nocturnal habits, small size, and soft and few calls (Barrionuevo *et al*. 2008; Girão and Albano 2010), combined with the low number of scientific expeditions conducted in humid montane forests in Peru. However, the sparse distribution is similar to that noted for the species elsewhere through the Andes (Hilty and Brown 1986; Fjeldså and Krabbe 1990; Marks *et al*. 1999; König *et al*. 1999; Ridgely and Greenfield 2001; Hilty 2003). An exception to this, probably explained by increased sampling efforts, is the northern Peruvian Andes. In recent years the northern forests of the Peruvian Andes have been subject to at least four ornithological expeditions and hence the greater number of records of *Aegolius h. harrisii* in that area. The other recognized subspecies seem to present a higher density (Marks *et al.* 1999; BirdLife International 2012), but their continuous mapping in various publications may be an overstatement of the abundance of the species, and probably, it is equally as sparsely-distributed elsewhere as *Aegolius h. harrisii* (Dan Lane, personal communication). However, its distribution depicted as few dots in a map might also be an understatement, following the natural inconspicuousness of the species (Girão and Albano 2010).

Acknowledgments: We thank Steven Cardiff, Donna L. Dittmann, Van Remsen, Letty Salinas, Jeremiah Trimble, Mauricio Ugarte, Thomas Valqui, Willem-pier Vellinga and Christopher Witt for data on the collected specimens. Jon Fjeldså, Peter Hocking, Dan Lane and Donna Schmitt gave information on some localities. Jean Bernal, Daniel Cáceres and Carlos Jiménez allowed us to publish their records. Michell León allowed us the use of his photograph. Manuel Plenge, Alex More and Juan Freile Ortiz helped with references. Aldo Muñoz helped in the field at ACP San Antonio. Renzo Piana reviewed the final draft of the document. We are indebted to xeno-canto.org, whose recordings gave a better picture of the distribution of the species.

Literature Cited

Barrionuevo, C., D. Ortiz and P. Capllonch. 2008. Nuevas localidades de la lechucita canela (*Aegolius harrisii dabbenei*) (Strigidae) para la Argentina. *Revista Nuestras Aves* 53: 45–47.

BirdLife International. 2011. *Important Bird Areas factsheet: Reserva Ecológica Cofán-Bermejo.* Accessible at http://www.birdlife.org/. Captured on 28 March 2012.

BirdLife International. 2012. Species factsheet: *Aegolius harrisii*. Accessible at http://www.birdlife.org/datazone/home. Captured on 29 April 2012.

Cassin, J. 1849. Descriptions of New Species of the Genera *Nyctale*, Brehm., and *Sycobius*, Vieill.; Specimens of Which Are in the Collection of the Academy of Natural Sciences of Philadelphia. *Proceedings of the Academy of Natural Sciences of Philadelphia* 4(1848-1849): 157–158.

Córdoba, S. and A. Ahumada. 2005. Confirmation of Buff-fronted Owl *Aegolius harrisii* for the Cordillera Oriental of Colombia. *Bulletin of the British Ornithologists' Club* 125: 56–58.

Fitzpatrick, J.W. and D.E. Willard. 1982. Twenty-one bird species new or little known from the Republic of Colombia. *Bulletin of the British*

Ornithologists' Club 102: 153–158.
Fjeldså, J. and N. Krabbe. 1990. *Birds of the High Andes*. University of Copenhagen: Zoological Museum and Svendborg: Apollo Books. 880 pp.
Girão, W. and C. Albano. 2010. Sinopse da história, taxonomia, distribuição e biologia do caboré *Aegolius harrisii* (Cassin, 1849). *Revista Brasileira de Ornitologia* 18: 102–109.
Hilty. S.L. 2003. *Birds of Venezuela*. Second Edition. Princeton: Princeton University Press. 928 p.
Hilty, S.L. and W.L. Brown. 1986. *A Guide to the Birds of Colombia*. Princeton: Princeton University Press. 996 pp.
König, C., F. Weick and J.H. Becking. 1999. *Owls: a guide to the owls of the World*. New Haven: Yale University Press. 462 pp.
Marcharé, J. and L. Ortlieb. 1993. Registros del Fenómeno El Niño en el Perú. *Bulletin de l'Institut Français d' Études Andines* 22: 32–52.
Marks, J.S., R.J. Cannings, and H. Mikkola. 1999. Family Strigidae (typical owls); pp. 76-243, in: J. del Hoyo, A. Elliott and J. Sargatal. (ed.) *Handbook of the Birds of the World. Volume 5: Barn-owls to Hummingbirds.* Barcelona: Lynx Edicions.
Meyer de Schauensee, R. 1966. *The species of birds of South America and their distribution*. Narberth: Livingston Publishing Company. 577 pp.
Negret, A.J., J. Taylor, R.C. Soares, R.B. Cavalcanti and C. Johnson. 1984. *Aves da região geopolítica do Distrito Federal.* Brasília: Secretaria Especial do Meio Ambiente (SEMA). 21 pp.
Olrog, C. 1979. Notas ornitológicas, XI. Sobre la colección del Instituto Miguel Lillo. *Acta Zoológica Lilloana* 33: 5–7.
Parker III, T.A., T.S. Schulenberg, G.R. Graves and M.J. Braun. 1985. The avifauna of the Huancabamba region, northern Peru. *Ornithological Monographs* 36: 169–197.
Remsen, J.V., Jr., and M.A. Traylor, Jr. 1983. Additions to the avifauna of Bolivia, part 2. *Condor* 85: 95–96.
Ridgely, R.S. and P.J. Greenfield. 2001. *The Birds of Ecuador*. Volume II: Field Guide. Ithaca: Cornell University Press. 740 pp.
Schulenberg, T.S., D.F. Stotz, D.F. Lane, J.P. O'Neill and T.A. Parker III. 2010. *Birds of Peru (Revised and Updated Edition)*. Princeton: Princeton University Press. 664 pp.
Sharpe, B. 1899. Bulletin of the British Ornithologists' Club No LXI. *The Ibis* V (Seventh Series): 439.
Studer, A. and D.M. Teixeira. 1994. Notes on the Buff-fronted Owl *Aegolius harrisii* in Brazil. *Bulletin of the British Ornithologists' Club* 114: 62–63.
Vellinga, W.P., J.N.M. Flanagan and T.R. Mark. 2004. New and interesting records of birds from Ayabaca province, Piura, north-west Peru. *Bulletin of the British Ornithologists*' Club 124: 124–142.
von Sneidern, K. 1954. Notas sobre algunas aves del Museo de Historia Natural de la Universidad del Cauca, Popayán, Colombia. *Novedades Colombianas* 1: 3–13.

Received: May 2012
Accepted: December 2013
Published online: February 2014
Editorial responsibility: Dárius Tubelis / Vítor de Q. Piacentini